



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Howard N. Straub

Examiner: Vy Q. Bui

Serial No.: 09/650,584

Art Unit: 3731

Filed: August 30, 2000

Confirmation No. 9208

For: OPHTHALMIC DEVICE AND METHOD OF MANUFACTURE AND USE

COPY

CERTIFICATE OF FACSIMILE

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being Facsimile transmitted to: 703-872-9306, Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313 on

By: David J. Ridders
David J. Ridders

April 28, 2005
Date

Mail Stop AF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

ATTN : Director of Technology Center 3700

PETITION TO WITHDRAW FINALITY OF OFFICE ACTION

Dear Director of Technology Center 3700:

Applicant hereby requests that the finality of the Office Action mailed December 28, 2004 be withdrawn. Applicant believes that the Office Action was improperly made final, as all of the timely and properly-filed Information Disclosure Statements have not been considered by the Examiner and the references cited therein made of record in this application.

Applicant notes that the first, non-final Office Action, mailed March 1, 2004, indicated that Information Disclosure Statements filed January 24, 2001, April 9, 2001, and May 23, 2002 have not been considered because they are not in the file. Copies of these Information Disclosure Statements

were provided again for the Examiner's convenience together with a response to the non-final Office Action on September 1, 2004, along with copies of the references cited therein provided on a CD-ROM. A fourth Information Disclosure Statement, with copies of the references cited therein in paper form, was also filed September 1, 2004.

None of the four 1449 forms were returned with the Final Office Action mailed December 28, 2004. The Final Office Action states that the "IDS in the CD has been ordered to the Examiner location and will be initialized and mailed to the applicant when the CD has been received and reviewed by the Examiner." However, during a February 11, 2005 telephone interview, the Examiner confirmed that the Information Disclosure Statements had not been received or considered by the Examiner. Any delays in filing this petition should not be held against Applicant, as Applicant has attempted to resolve this issue through multiple communications with the Examiner.

As the four Information Disclosure Statements have been properly filed, Applicant submits that it is inappropriate to issue a final Office Action without having considered the Information Disclosure Statements. 37 CFR 1.97 states that:

(b) An information disclosure statement shall be considered by the Office if filed by the applicant within any one of the following time periods:

(1) Within three months of the filing date of a national application other than a continued prosecution application under § 1.53(d);

(2) Within three months of the date of entry of the national stage as set forth in § 1.491 in an international application;

(3) Before the mailing of a first Office action on the merits; or

(4) Before the mailing of a first Office action after the filing of a request for continued examination under § 1.114.

(c) An information disclosure statement shall be considered by the Office if filed after the period specified in paragraph (b) of this section, provided that the information disclosure statement is filed before the mailing date of any of a final action under § 1.113, a notice of allowance under § 1.311, or an action that otherwise closes prosecution in the application, and it is accompanied by one of:

(1) The statement specified in paragraph (e) of this section; or

(2) The fee set forth in § 1.17(p).

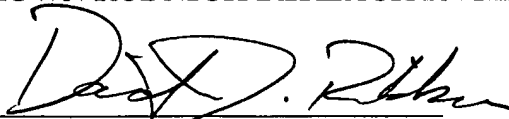
As each of the four Information Disclosure Statements were properly filed under 37 CFR 1.97(b) or (c), Applicant submits that the Office is obligated to consider these Information Disclosure Statements, as the rule states "shall be considered by the Office...." As the Final Office Action serves to close prosecution, Applicant submits that the Office Action mailed December 28, 2004 was improperly made Final.

Applicant notes that because the first three Information Disclosure Statements were filed before the date of the first Office Action on the merits, any new rejection of the claims based on references cited therein would appropriately be a non-final Office Action.

An Amendment and Response is filed on the same date as this petition in response to the Final Office Action in the above-identified application. A petition for a one-month extension through April 28, 2005 is filed with the Amendment and Response. Authorization is hereby given to charge Deposit Account No. 50-0369 in connection with any fees for extension of time or any other fee that may be necessary to permit entry of this petition.

Respectfully submitted,

BROWN RUDNICK BERLACK ISRAELS LLP



Date: April 28, 2005

David J. Ridders
Reg. No.: 43,882
Attorney for Applicant
One Financial Center
Boston, MA 02111
Tel: (617) 856-8382
Fax: (617) 856-8201
Customer No. 21710

SYSTEM OF OPHTHALMOLOGY

EDITED BY
SIR STEWART DUKE-ELDER

VOL. II

THE ANATOMY OF THE VISUAL SYSTEM

BY
SIR STEWART DUKE-ELDER
G.C.V.O., F.R.S.

AND
KENNETH C. WYBAR
B.Sc., M.D., CH.M., F.R.C.S.
Lecturer in Ophthalmology, University of London,
Ophthalmic Surgeon, Moorfields Eye Hospital, and
the Royal Marsden Hospital.

BEST AVAILABLE COPY

WITH 842 ILLUSTRATIONS AND 3 COLOURED PLATES

LONDON
HENRY KIMPTON
1961

Copyright © 1961 by
Henry Kimpton (Medical Book Department of
Hirschfeld Brothers, Limited).

All rights reserved.

This book is protected under the Berne
Convention. It may not be reproduced by
any means, in whole or in part, without
the permission of the publishers.

Reprinted, 1969
Reprinted, 1971

BEST AVAILABLE COPY

PRINTED IN GREAT BRITAIN

continued forwards to line the inner surfaces of the ciliary body and the iris.

The fibrous tunic is united to the vascular tunic anteriorly and posteriorly at two INSERTION RINGS, the anterior of which lies in the region of the corneo-scleral junction, while the posterior encircles the exit of the optic nerve. Between these two rings the two tunics are separated by a capillary space, the PERICHOROIDAL SPACE, bridged by delicate lamellar tissue and crossed by the nerves which enter the eye and by the arteries and veins which feed and drain the choroid. Anterior to the first of these rings, where the vascular tunic separates itself from the fibrous tunic to form the iris, this capillary interval becomes a wide space, the ANTERIOR CHAMBER. Between the vascular tunic and the nervous tunic there is no anatomical interval, the outer layer of the latter being in very close relation with the inner layer of the former. The LENS, supported from the ciliary body by a suspensory ligament (the ZONULE), is situated immediately behind the iris, and the small space between the two is termed the POSTERIOR CHAMBER. The whole of the cavity of the eyeball behind the lens is occupied by a transparent gel, the VITREOUS BODY, while in front of the lens a clear fluid, the AQUEOUS HUMOUR, fills the remaining spaces of the globe—the anterior and posterior chambers.

GENERAL TOPOGRAPHY

The eye is a slightly asymmetrical sphere, having the characteristics of an oblate spheroid, somewhat flattened from above down. Its topography is usually described in the terms ordinarily applied to such a figure (Fig. 65).

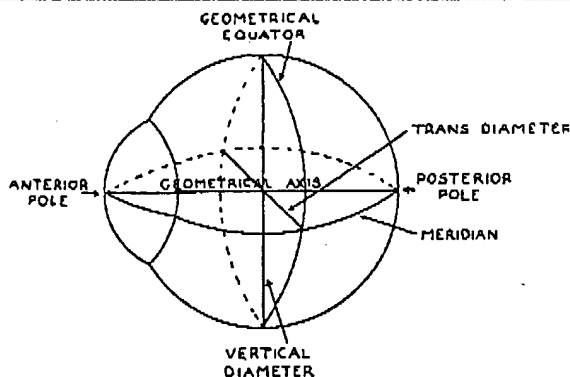


FIG. 65.—THE GENERAL TOPOGRAPHY OF THE EYE.

The central points of the corneal and scleral curvatures are called the *anterior* and *posterior poles*. It is to be remembered that, contrary to the impression given by many standard text-books of anatomy, these are somewhat vague dimensional terms without pretence to topographical exactitude nor specific relation to any structure such as the fovea (Fison, 1958). The line joining these two poles is the *geometrical axis*; if it is

measured
called the
geometric
functions
the fovea
surfaces

A ci
equator,
anatomic
further t
nerve is
fore corr
the two
angles, i
transve
temporal
the cent

Th
surface
a radii
scleral
join at
furrow
It is so
side, b
attach
region
diamet
weakl
pletely

FIG.
ASPE

dian
one l
exit
equal

measured from the anterior surface of the cornea to the outside of the sclera, this is called the *external axis*, if to the anterior surface of the retina, the *internal*. The geometrical axis (an anatomical term) is not to be confused with the "visual axis" (a functional concept denoting the line joining the fixation point, the nodal point and the fovea) or the "optic axis" (the hypothetical line upon which the refracting surfaces are centred).

A circumferential line joining all points equidistant from the poles is the *anatomical equator*, which thus divides the eye into two *hemispheres*, anterior and posterior. The anatomical equator is not symmetrical, but lies further forward on the nasal side and further back on the temporal, since the part of the globe lying temporal to the optic nerve is the more strongly curved backwards and outwards. This line does not therefore correspond with the *geometrical equator*, which is a simple circle equidistant from the two poles. A circle drawn through the poles and crossing the equator at right angles, is called a *meridian*. The three diameters are called *sagittal* (antero-posterior), *transverse*, and *vertical*. The vertical meridian divides the eye into *nasal* (*medial*) and *temporal* (*lateral*) halves (the term *inner* is best used to designate that which lies nearer the central point of the eye, and *outer* as that nearer the surface).

The surface of the eye is divided into two segments; the anterior corneal surface, which occupies 1/6 of the whole, is the more acutely curved, having a radius of a little less than 8 mm.,¹ while the posterior scleral segment has one of 12 mm. Where the two areas

join at the corneo-scleral margin there is a shallow circular furrow, the **EXTERNAL SCLERAL SULCUS** (Schwalbe, 1887). It is somewhat more evident on the nasal than the temporal side, but in natural conditions it is partly filled up by the attachments of the conjunctiva and the bulbar fascia in this region. The cornea itself is slightly elliptical, the horizontal diameter being greater than the vertical. The anterior part of the sclera is weakly curved, but behind the equator a more truly, although not a completely spherical form is attained. Owing to this anterior flattening, the posterior scleral curvature, if continued round, would enclose the whole of the cornea (Fig. 66).



FIG. 66.

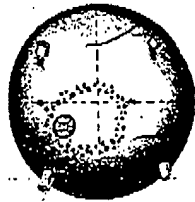


FIG. 67.—THE POSTERIOR ASPECT OF RIGHT EYEBALL (Diagrammatic).

The optic nerve emerges somewhat to the nasal side of and below the posterior pole (Fig. 67), its centre lying 3 mm. nasal to and 1 mm. below it. Around the exit of the nerve, the **CILIARY NERVES** (ten or more) and the **SHORT POSTERIOR CILIARY ARTERIES** (about twenty) pierce the sclera, arranged in an irregular ring. A short way further out, two **LONG POSTERIOR CILIARY ARTERIES** enter the globe, one on each side on the horizontal meri-

dian; they are thus slightly above the axis of the optic nerve, the nasal one lying 3.6 mm., and the temporal one 3.9 mm. from this structure. Four exit veins (**VORTEX VEINS**) draining the choroid emerge a little behind the equator in the four quadrants; while the **ANTERIOR CILIARY ARTERIES**